Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality

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Draft

AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Gotec Plus Sun LLC

Mailing Address: 107 Industrial Road, Williamstown, Kentucky

41097

Source Name: Gotec Plus Sun LLC Mailing Address: 107 Industrial Road

Williamstown, Kentucky 41097

Source Location: 107 Industrial Road, Williamstown, Kentucky

Permit ID: F-07-038 Agency Interest #: 1500

Activity ID: APE20070002

Review Type: Conditional Major, Construction / Operating

Source ID: 21-081-00014

Regional Office: Florence Regional Office

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Application

Complete Date: June 21, 2007

Issuance Date: Revision Date: Expiration Date:

> John S. Lyons, Director Division for Air Quality

Revised 05/07/07

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	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
V-98-012	Initial Issuance	F442	March 31, 1998	October 23, 1998	Initial Issuance
V-98-012 R1	Revision 1	51449	July 05, 2000	January 4, 2002	Construction and Revision to Permit
V-03-048	Renewal	55930	November 10, 2003	February 1, 2005	Construction and Permit Renewal
F-07-038	Initial Issuance	APE20070002	June 21 2007		Construction and Transition from Title V to Conditional Major source

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EP 01 (HP-1) Hand Paint Line

Construction Commenced: 1985

Hand paint coating process includes the following process flow:

- a. Parts are placed on surface inside emissions capture enclosure
- b. Parts are hand painted with adhesives
- c. Parts are cured
- d. Parts are hand painted with second coat if necessary
- e. Parts are dried and then unloaded.

Coating area is enclosed.

Add-on control device: Regenerative thermal oxidizers.

APPLICABLE REGULATIONS:

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981

1. Operating Limitations:

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B.2. below.

2. <u>Emission Limitations</u>:

- a. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities.
- b. For source-wide VOC limitation, see Section D.1.a.
- c. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for existing facilities.

4. Specific Monitoring Requirements:

See Specific Monitoring Requirements in group requirements for existing facilities.

5. Specific Record Keeping Requirements:

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 02 (DT-1) Dip Tank Coating Machine

Construction Commenced: 1993

Dip tank coating machine process consists of the following process flow:

- a. Parts are loaded onto fixtures and transported via chain conveyor
- b. Parts are immersed and conveyed through primer
- c. Parts are cured
- d. Parts are immersed and conveyed through top coat
- e. Parts are dried and then unloaded.

Add-on control device: Regenerative thermal oxidizers.

APPLICABLE REGULATIONS:

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981.

1. **Operating Limitations:**

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B.2. below.

2. Emission Limitations:

- a. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities.
- b. For source-wide VOC limitation, see Section D.1.a.
- c. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for existing facilities.

4. Specific Monitoring Requirements:

See Specific Monitoring Requirements in group requirements for existing facilities.

5. Specific Record Keeping Requirements:

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 03 SB-1 Spray Booth

SB-2 Spray Booth

SB-3 Linear Spray Booth

SB-4 Table Spray Booth

SB-5 Spray Booth

Construction Commenced: 1994 through 1996

Spray booths are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981.

1. **Operating Limitations:**

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B 2 below

2. Emission Limitations:

- a. 401 KAR 59:010, New process operations,
 - Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.
- b. 401 KAR 59:010, New process operations,

Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities.
- d. For source-wide VOC limitation, see Section D.1.a.
- e. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for existing facilities.

4. Specific Monitoring Requirements:

a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. **Specific Record Keeping Requirements:**

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. **Specific Control Equipment Operating Conditions:**

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 04 (RS-1, RS-2, RS-3, RS-4, RS-5, RS-6 and RS-7) 7 Rotary Spray Booths

Construction Commenced: 1995 through 1999

Coating operations for the above spraying machines consist of the following process flow:

- a. Parts are loaded onto fixtures and conveyed via table index
- b. Parts are sprayed with primer
- c. Parts are cured
- d. Parts are sprayed with top coat
- e. Parts are dried and then unloaded

Spray booths are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981.

1. Operating Limitations:

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B.2. below.

2. Emission Limitations:

- a. 401 KAR 59:010, New process operations,
 - Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.
- b. 401 KAR 59:010, New process operations,

Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities.
- d. For source-wide VOC limitation, see Section D.1.a.
- e. For source-wide HAP emission limitations, see Section D.1.b. and c.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements:</u>

See Specific Testing Requirements in group requirements for existing facilities.

4. **Specific Monitoring Requirements:**

- a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. Specific Record Keeping Requirements:

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 05 (TS-1, TS-2, TS-3, TS-4 and TS-5) 5 Tumble Spray Booths

Construction Commenced: 1994 through 1997

Coating operations for the above spraying machines consist of the following process flow:

- a. Parts are placed into a batch accumulation vessel
- b. The accumulation vessel begins rotating
- c. Parts are sprayed with primer
- d. Parts are cured
- e. Parts are sprayed with top coat
- f. Parts are dried and then unloaded.

Spray booths are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981.

1. Operating Limitations:

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B.2. below.

2. Emission Limitations:

- a. 401 KAR 59:010, New process operations,
 - Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.
- b. 401 KAR 59:010, New process operations,

Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities.
- d. For source-wide VOC limitation, see Section D.1.a.
- e. For source-wide HAP emission limitations, see Section D.1.b. and c.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements</u>:

See Specific Testing Requirements in group requirements for existing facilities.

4. **Specific Monitoring Requirements:**

- a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. Specific Record Keeping Requirements:

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 06 (RC1) Roller Coating Machine

Construction Commenced: 2001

Roller Coating machines are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

APPLICABLE REGULATIONS:

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations commenced after February 4, 1981.

1. **Operating Limitations:**

The rate of materials used in affected facilities shall not produce emissions which exceed the limitations as described in Section B.2. below.

2. Emission Limitations:

- a. 401 KAR 59:225. For VOC emission limitation, see group requirements for existing facilities
- b. For source-wide VOC limitation, see Section D.1.a.
- c. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for existing facilities.

4. Specific Monitoring Requirements:

See Specific Monitoring Requirements in group requirements for existing facilities.

5. Specific Record Keeping Requirements:

- a. 401 KAR 59:225. See Specific Record Keeping Requirements in group requirements for existing facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for existing facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group requirements for existing facilities:

EP 01 Hand Paint Line

EP 02 Dip Tank Coating Machine

EP 03 5 Spray Booths

EP 04 7 Rotary Spray Booths

EP 05 5 Tumbles Spray Booths

EP 06 Roller Coating Machine

Control equipment:

RTO-A: One burner with a capacity of 8.4 MMBtu/hr. Three banks of filters (24 filters/bank) are utilized to control PM emissions. Claimed efficiency of the filter bank is 90%. The RTO was tested on December 10, 2005. A destruction efficiency of 97% was established.

RTO-B: One burner with a capacity of 8.4 MMBtu/hr. Three banks of filters (24 filters/bank) are utilized to control PM emissions. Claimed efficiency of the filter bank is 90%. The RTO was tested on December 10, 2005. A destruction efficiency of 98% was established.

RTO-C: Two burners with a total capacity of 16 MM Btu/hr. Three banks of filters (24 filters/bank) will be utilized to control PM emissions. Claimed efficiency of the filter bank is 90%.

Construction commenced: RTO-A and RTO-B in 1988; RTO-C projected in 2007

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations is applicable to emission units, EP03, EP04 and EP 05.

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations is applicable to emission units, EP 01, EP 02, EP 03, EP 04, EP 05 and EP 06.

1. Operating Limitations:

Equipment and controls listed shall be operated in such manner as to ensure compliance with the emission limitations in § B.2. below.

2. Emission Limitations:

401 KAR 59:225 §3, Standard for VOCs:

The permittee shall not emit from each affected facility listed in the above group more than fifteen (15) per cent by weight of the VOC's net input into the affected facility.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Initial Compliance Demonstration Method:

Weight percentage of VOCs emitted = VOC emitted/VOC input Where:

VOC input = Σ (lbs of coating input to each coating machine or spray booth x VOC weight % of coating)

- + Σ (lbs of solvent input to the same coating machine or the spray booth x VOC weight % of solvent)
- $+ \Sigma$ (lbs of cleaning solution used for the same coating machine or the spray booth x VOC weight % of cleaning solution)

VOC emitted = [1- (capture efficiency of VOCs x control device destruction efficiency)] x **VOC input.**

Destruction efficiencies of 97% and 98% were determined for RTO-A and RTO-B respectively (December 10, 2005 compliance test). The next compliance test shall be performed no later than 5 years from this date to determine the destruction efficiencies of the RTOs.

Capture efficiency for permanent total enclosure

The pressure drop across each enclosure shall be at least 0.007 in H_2O as established in Method 204 of Appendix M to 40 CFR Part 51.

Gotec Plus Sun completed a performance test of the capture system for coating machines on December 12, 2005. Capture efficiency for EP 01 was determined to be 92%.

Continuing compliance demonstration for the permanent total enclosures:

At all times, the permittee shall maintain the pressure drop across each permanent total enclosure above the pressure drop limit.

Continuing compliance demonstration for the RTOs:

(1) The permittee shall develop and implement a written startup, shutdown, and malfunction plan to include the following procedure:

Start-up: The coating process can be operated only when RTO is fully operational and at the proper operating conditions.

Shut down: RTO can be shut down after all coating lines are deactivated.

Malfunction: In case of a malfunction resulting from a temperature drop below the required level, all coating lines must be shut down. If the RTO is unable to continue operational, the coating lines must remain shut down. If the RTO requires a lengthy shut down to repair, the permittee shall contact the Regional Office. The corrective actions, and the duration of shut down shall be documented.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) The permittee shall install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 °Celsius, whichever is greater. The thermocouple or temperature sensor must be installed in the combustion chamber at a location in the combustion zone.

(3) The combustion chamber temperature of the control equipment shall be recorded continuously on chart recorders. The records shall be made readily available for inspection. Additionally, records shall be maintained of each occurrence where the combustion chamber temperature falls 50°F or more below the temperature as determined during the most recent stack test (3-hour average). All such occurrences shall be considered deviations from permit requirements.

3. **Specific Testing Requirements:**

- A performance test was performed for both regenerative thermal oxidizers on December 10, 2005. The stack test concluded that the destruction efficiency for RTO-A and RTO-B was 97% and 98% respectively. The next performance test shall be performed before December 10, 2010.
- b. A performance test was performed for Hand Paint Line (EP 01) on December 12, 2005. Capture efficiency for the paint line was determined to be 92%.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the paint usage rates and its VOC/HAP contents as applied and amounts of cleanup solvent utilized at each affected facility on a daily basis.
- b. The temperature of each regenerative thermal oxidizer (RTO) shall be monitored continuously. If any temperature deviation of greater that 50°F from the temperature determined at the latest stack test continues for more than one (1) hour, the affected facility shall be shut down until any problems are corrected.
- c. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

5. Specific Record Keeping Requirements:

Daily records shall be maintained by the source for the most recent two (2) year period. These records shall be available to the Division upon request. The records shall include, but not be limited to the following:

- a. Applicable administrative regulation number;
- b. Applicable method and substrate type;
- c. Amount and type of adhesive, coating, or solvent used at each point of application, including exempt compound;

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. The VOC content as applied in each adhesive, coating, or solvent;
- e. The date for each application for adhesive, coating, or solvent;
- f. The amount of surface preparation, clean up, or washup solvent (including exempt compounds) used and the VOC content of each; and
- g. The combustion chamber temperature of the control equipment shall be recorded continuously on chart recorders. The records shall be made readily available for inspection. Additionally, records shall be maintained of each occurrence where the combustion chamber temperature falls 50°F or more below the temperature as determined during the most recent stack test (3-hour average). All such occurrences shall be considered deviations from permit requirements. See Section F8. Also, the corrective action(s) taken shall be recorded;
- h. For each capture system that is a permanent total enclosure, the data and documentation used to support a determination that the capture system meets the criteria in Method 204 for a permanent total enclosure and has a capture efficiency of 100 percent;
- i. For each capture system that is not a permanent total enclosure, the data and documentation used to determine capture efficiency.

6. **Specific Reporting Requirements:**

See Section D.3., Specific reporting Requirements,

7. Specific Control Equipment Operating Conditions:

- a. Each of the coating machines shall use the RTOs as the control method for the VOC. Interlocks shall be used to prevent operation of these machines without prior activation of the incinerator. Additionally, alarms shall continue to be used on the incinerator to assure that it is operating above or at the required temperature determined during the most recent stack test based on a three-hour average.
- b. All control devices shall be properly maintained, kept in good operating condition, and used in conjunction with the associated processes in accordance with the manufacturer's specifications.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 07 (RC2) Roller Coating Machine

Construction Commenced: 2003

Roller Coating machines are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

APPLICABLE REGULATIONS:

None

1. **Operating Limitations:**

VOC emissions from EP 07 shall be routed and controlled by the RTOs.

2. Emission Limitations:

- a. For source-wide VOC limitation, see Section D.1.a.
- b. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for new facilities.

4. Specific Monitoring Requirements:

See Specific Monitoring Requirements in group requirements for new facilities.

5. **Specific Record Keeping Requirements:**

- a. See Specific Record Keeping Requirements in group requirements for new facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 08 (CE-1) Chain-On-Edge Spray Machine

Construction Commenced: June 2004

EP 13 (CE-2, CE-3, CE-4 & CE-5) 4 Chain-On-Edge Spray Machines

Construction Projected: August 2007

Coating operations for the above spraying machines consist of the following process flow:

- a. Parts are loaded onto fixtures and conveyed via chain
- b. Parts are sprayed with primer
- c. Parts are cured
- d. Parts are sprayed with top coat
- e. Parts are dried and then unloaded

Chain-on-edge spray machines are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

1. **Operating Limitations:**

VOC emissions from EP 08 and EP 13 shall be routed and controlled by the RTOs.

2. Emission Limitations:

- a. 401 KAR 59:010, New process operations, Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.
- b. 401 KAR 59:010, New process operations, Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. For source-wide VOC limitation, see Section D.1.a.
- d. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. **Specific Record Keeping Requirements:**

- a. See Specific Record Keeping Requirements in group requirements for new facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 09 (RS-8) Rotary Spray Booth

Construction Commenced: 2004

EP 14 (RS-9, RS-10, RS-11, RS-12, RS-13, RS-14 & RS-15) 7 Rotary Spray Booths

Construction Projected: August, 2007

Coating operations for the above spraying machines consist of the following process flow:

- a. Parts are loaded onto fixtures and conveyed table index
- b. Parts are sprayed with primer
- c. Parts are cured
- d. Parts are sprayed with top coat
- e. Parts are dried and then unloaded.

Rotary spray booths are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

1. Operating Limitations:

VOC emissions from EP 09 and EP 14 shall be routed and controlled by the RTOs.

2. Emission Limitations:

a. 401 KAR 59:010, New process operations,

Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.

b. 401 KAR 59:010, New process operations,

Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. For source-wide VOC limitation, see Section D.1.a.
- d. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. **Specific Record Keeping Requirements:**

- a. See Specific Record Keeping Requirements in group requirements for new facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 10 (DS-1) Dip and Spin Coating Machine

Construction Projected: August, 2007

Coating operations for the above spraying machine consists of the following process flow:

- a. Parts are batch loaded into dip basket.
- b. Parts are immersed into primer
- c. Parts are cured
- d. Parts are immersed into top coat
- e. Parts are spin dried and then unloaded.

EP 11 (DT-2) Dip Tank Coating Machine

Construction Projected: 2007

Coating operations for the above spraying machine consists of the following process flow:

- a. Parts are batch loaded into dip basket.
- b. Parts are immersed into primer
- c. Parts are cured
- d. Parts are immersed into top coat
- e. Parts are spin dried and then unloaded.

Dip tank coating machines are totally enclosed during coating and spin cycles.

Add-on control device: Regenerative thermal oxidizers.

APPLICABLE REGULATIONS:

None

1. Operating Limitations:

VOC emissions from EP 10 and EP 11 shall be routed and controlled by the RTOs.

2. Emission Limitations:

- a. For source-wide VOC limitation, see Section D.1.a.
- b. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for new facilities.

4. **Specific Monitoring Requirements:**

See Specific Monitoring Requirements in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements:

- a. See Specific Record Keeping Requirements in the group requirements for new facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 12 (TS-6, TS-7 and TS-8) 3 Tumble Spray Booths

Construction Projected: 2007

Coating operations for the above spraying machines consist of the following process flow:

- a. Parts are placed into a batch accumulation vessel
- b. The accumulation vessel begins rotating
- c. Parts are sprayed with primer
- d. Parts are cured
- e. Parts are sprayed with top coat
- f. Parts are dried and then unloaded.

Spray booths are totally enclosed.

Add-on control device: Regenerative thermal oxidizers.

Particulate Control: 1. Spray booth exhaust filters

Claimed efficiency: 90%

2. 3 layers of filters (24 filters/layer) at the intake of RTO

Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units commenced after July 2, 1975.

1. Operating Limitations:

VOC emissions from EP 12 shall be routed and controlled by the RTOs.

2. Emission Limitations:

a. 401 KAR 59:010, New process operations,

Section 3(2), PM emissions shall not exceed the hourly allowable rate of 2.34 lbs/hr.

b. 401 KAR 59:010, New process operations,

Section 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method for a and b:

See Specific Monitoring Requirements in Section B.4.

- c. For source-wide VOC limitation, see Section D.1.a.
- d. For source-wide HAP emission limitations, see Section D.1.b. and c.

3. Testing Requirements:

See Specific Testing Requirements in group requirements for new facilities.

4. **Specific Monitoring Requirements:**

a. Filters shall be in place at all times when a machine is applying paint. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c. Resistance to airflow across the RTO filter bank shall be monitored by a manometer. An alarm shall sound for high differential pressure indicating that filters need to be changed.

5. **Specific Record Keeping Requirements:**

- a. See Specific Record Keeping Requirements in group requirements for new facilities.
- b. For source wide VOC/HAP emissions, see Section D.2., Specific Record Keeping Requirements.

6. Specific Reporting Requirements:

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Specific Control Equipment Operating Conditions in group requirements for new facilities.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group requirements for new facilities:

- **EP 07** Roller Coating Machine
- EP 08 Chain-On-Edge Spray Machine
- EP 09 Rotary Spray Booth
- **EP 10** Dip and Spin Coating Machine
- **EP 11 Dip Tank Coating Machine**
- **EP 12 3 Tumble Spray Booths**
- EP 13 4 Chain-On-Edge Spray Machines
- **EP 14** 7 Rotary Spray Booths

Control equipment:

RTO-A: One burner with a capacity of 8.4 MMBtu/hr. Three banks of filters (24 filters/bank) are utilized to control PM emissions. Claimed efficiency of the filter bank is 90%. The RTO was tested on December 10, 2005. A destruction efficiency of 97% was established.

RTO-B: One burner with a capacity of 8.4 MMBtu/hr. Three banks of filters (24 filters/bank) are utilized to control PM emissions. Claimed efficiency of the filter bank is 90%. The RTO was tested on December 10, 2005. A destruction efficiency of 98% was established.

RTO-C: Two burners with a total capacity of 16 MM Btu/hr. Three banks of filters (24 filters/bank) will be utilized to control PM emissions. Claimed efficiency of the filter bank is 90%.

Construction commenced: RTO-A and RTO-B in 1988; RTO-C projected in 2007

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to emission units, EP 08, EP 09, EP 12, EP 13 and EP 14.

1. **Operating Limitations:**

VOC emissions from the affected facilities (EP 07, EP 08, EP 09, EP 10, EP 11, EP 12, EP 13 and EP 14) shall be routed and controlled by the RTOs.

2. Emission Limitations:

VOC emission limit is source wide; see Section D.1.a.

3. **Specific Testing Requirements:**

- a. A performance test was performed for both regenerative thermal oxidizers in December 10, 2005. The stack test concluded that the destruction efficiency for RTO-A and RTO-B was 97% and 98% respectively. The next performance test shall be performed before December 10, 2010.
- b. A performance test was performed for Chain on edge machine (EP 08) on December 12, 2005. Capture efficiency of the spray machine was determined to be 100%.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The permittee shall perform representative capture efficiency test for following emission points:

- 1. One rotary spray booth from EP 14.
- 2. One tumble spray booth from EP12
- 3. Dip and spin coating machine, EP 10

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the paint usage rates and its VOC/HAP contents as applied and amounts of cleanup solvent utilized at each affected facility on a daily basis.
- b. The temperature of each regenerative thermal oxidizer (RTO) shall be monitored continuously. If any temperature deviation of greater that 50°F from the temperature determined at the latest stack test continues for more than one (1) hour, the affected facility shall be shut down until any problems are corrected.
- c. The permittee shall perform a qualitative visual observation of the opacity of emissions from RTO stacks on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

5. **Specific Record Keeping Requirements:**

Daily records shall be maintained by the source for the most recent two (2) year period. These records shall be available to the Division upon request. The records shall include, but not be limited to the following:

- a. Applicable administrative regulation number;
- b. Applicable method and substrate type;
- c. Amount and type of adhesive, coating, or solvent used at each point of application, including exempt compound;
- d. The VOC content as applied in each adhesive, coating, or solvent;
- e. The date for each application for adhesive, coating, or solvent;
- f. The amount of surface preparation, clean up, or washup solvent (including exempt compounds) used and the VOC content of each; and
- g. The combustion chamber temperature of the control equipment shall be recorded continuously on chart recorders. The records shall be made readily available for inspection. Additionally, records shall be maintained of each occurrence where the combustion chamber temperature falls 50°F or more below the temperature as determined during the most recent stack test (3-hour average). All such occurrences shall be considered deviations from permit requirements. See Section F8. Also, the corrective action(s) taken shall be recorded;
- h. For each capture system that is a permanent total enclosure, the data and documentation used to support a determination that the capture system meets the criteria in Method 204 for a permanent total enclosure and has a capture efficiency of 100 percent;
- i. For each capture system that is not a permanent total enclosure, the data and documentation used to determine capture efficiency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. **Specific Reporting Requirements:**

See Section D.3., Specific Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall develop and implement a written startup, shutdown, and malfunction plan to include the following procedure:

 Start-up: The coating process can be operated only when RTO is fully operational and at the proper operating conditions.

 Shut down: RTO can be shut down after all coating lines are deactivated.

 Malfunction: In case of a malfunction resulting from a temperature drop below the required level, all coating lines must be shut down. If the RTO is unable to continue operational, the coating lines must remain shut down. If the RTO requires a lengthy shut down to repair, the permittee shall contact the Regional Office. The corrective actions, and the duration of shut down shall be documented.
- b. The permittee shall install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 °Celsius, whichever is greater. The thermocouple or temperature sensor must be installed in the combustion chamber at a location in the combustion zone.
- c. The combustion chamber temperature of the control equipment shall be recorded continuously on chart recorders. The records shall be made readily available for inspection. Additionally, records shall be maintained of each occurrence where the combustion chamber temperature falls 50°F or more below the temperature as determined during the most recent stack test (3-hour average). All such occurrences shall be considered deviations from permit requirements
- d. Each of the coating machines and the spray booths shall use the RTOs as the control method for the VOC. Interlocks shall be used to prevent operation of these machines without prior activation of the incinerator. Additionally, alarms shall continue to be used on the incinerator to assure that it is operating above or at the required temperature determined during the most recent stack test based on a three-hour average.
- e. All control devices shall be properly maintained, kept in good operating condition, and used in conjunction with the associated processes in accordance with the manufacturer's specifications.
- f. The pressure drop across each enclosure shall be at least 0.007 in H_2O as established in Method 204 of Appendix M to 40 CFR Part 51.

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	Laboratory Fume Hood	401 KAR 59:010
2.	Auger Phosphatizer	401 KAR 59:010
3.	Batch Phosphatizers (2)	401 KAR 59:010
4.	Parts Washer	NA
5.	Grit Blast Machines (5)	401 KAR 59:010
6.	Product Mixing Room	401 KAR 59:010

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

1. Source Wide Emission Limitations:

a. *VOC emission limitations*. Volatile organic compound (VOC) emissions shall be less than or equal to 90 tons per rolling 12-month period.

Compliance Demonstration Method:

Compliance shall be demonstrated by a material balance method consisting of record keeping of coatings and solvent utilized, VOC content and resulting emissions, which will be summarized on a monthly basis. The equation for monthly record keeping is as follows:

$$P_m = \{ \sum (i=1...j) \ U_i (gal / month) \ x \ D_i (lbs \ VOC / gal) / 2000 \} \{ 1 - DRE \ x \ CE \} \}$$

Where P_m equals current monthly VOC emissions in tons and the summation of VOC emissions is over the number of coatings j applied on each affected facility during the month. Here U_i is the volume (gal/month) used and D_i is the corresponding VOC content (lbs/gal) for each respective coating.

DRE=organic volatile matter destruction or removal efficiency of control device. CE=organic volatile matter capture efficiency of the capture system for work station.

The 12-month rolling average of VOC inputs is calculated as follows: $P_a = P_m (current \ month) + P_m (preceding 11 \ months)$ Where P_a equals VOC inputs over the last 12 month period.

b. *Individual HAP emission limitations*. Individual hazardous air pollutant (HAP) emissions shall be less than or equal to 9 tons per rolling 12-month period.

Compliance Demonstration Method:

Compliance shall be demonstrated by a material balance method consisting of record keeping of coatings and solvent utilized, HAP content and resulting emissions, which will be summarized on a monthly basis. The equation for monthly record keeping is as follows:

$$Q_m = \{ \sum (i = 1...j) \ U \ (gal \ /month) \ x \ D_i \ (lbs \ HAP \ /gal) / \ 2000 \} \{ 1 - DRE \ x \ CE \}$$

Where,

 Q_m equals current monthly HAP emissions in tons and the summation of HAP emissions is over the number of coatings j mixed or processed on each affected facility i during the month. Here U is the volume (gal/month) used and Di is the corresponding HAP content (lbs/gal) for each respective coating.

DRE=organic volatile matter destruction or removal efficiency of control device.

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

CE=organic volatile matter capture efficiency of the capture system for work station. The 12-month rolling average of HAP emissions is calculated as follows:

 $Q_a = Q_m$ (current month) + Q_m (preceding 11 months) Where Q_a equals HAP emissions over the last 12 month period.

b. *Combined HAP emission limitations*. The permittee shall keep source wide emissions of combined HAPs no greater than 22.5 tons during any consecutive 12 month period.

Compliance Demonstration Method:

Combined HAP emissions =
$$\sum_{j=1}^{m} Q_{_{aj}}$$

Where,

j = individual HAP emission

m = total number of single HAP emissions

2. **Specific Record Keeping Requirements:**

- a. Monthly records shall be kept of all adhesives, thinners, and clean-up solutions used, including the type, amount, VOC content by weight percent, less any water and/or exempt solvent.
- b. Monthly records shall be kept of all materials containing HAP(s) used for the above affected facilities, including the product type, amount used and weight percentages of all individual HAPs.
- c. VOC and HAP emissions shall be calculated monthly per Section D of this permit, and every month, a new 12-month rolling total for VOC and HAP emissions shall be calculated.
- d. All records shall be retained by the source for a period of five years. These records, as well as purchase orders and invoices for all VOC/HAP containing materials, shall be made available for inspection upon request by any authorized representative of the Division for Air Quality.

3. Specific Reporting Requirements:

- a. Any deviations from requirements of section B shall be reported.
- b. The VOC/HAP emission calculation for each month in the semi-annual period shall be reported.
- c. The rolling 12 month total for VOC/HAP during each month in the semi-annual period shall be reported.
- d. See Section F5

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Florence Regional Office

Division for Air Quality
Central Files

8020 Veteran Memorial Drive Suite 110 Frankfort, KY 40601

Florence, Kentucky 41042

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.

- 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - (1) The size and location of both the original and replacement units; and
 - (2) Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - (1) Re-install the original unit and remove or dismantle the replacement unit; or
 - (2) Submit an application to permit the replacement unit as a permanent change.

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SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a-6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points EP10, EP11, EP12, EP13 and EP 14 in accordance with the terms and conditions of this permit.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the draft permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to

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SECTION G - GENERAL PROVISIONS (CONTINUED)

the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
 - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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SECTION H - ALTERNATE OPERATING SCENARIOS

None

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SECTION I - COMPLIANCE SCHEDULE

None